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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/661,214	09/14/2000	William P. Bunton	P00-3380	1543

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EXAMINER

KAPADIA, MILAN S

ART UNIT PAPER NUMBER

2144

DATE MAILED: 06/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/661,214

Applicant(s)

BUNTON, WILLIAM P.

Examiner

Milan S Kapadia

Art Unit

2144

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Notice to Applicant

1. This communication is in response to the amendment filed 11 March 2004.
Claims 1-30 are pending. Claims 1, 2, 13, and 22 have been amended.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nord (5,600,793) in view of Tetrick et al. (4,570,220) and further in view of official notice.

(A) As per claims 1 and 2, Nord teaches handshaking across a communication link to indicate readiness for data transmission and transmitting information after handshaking across the communication link (Nord; abstract)

Nord fails to expressly teach locking a communication link, wherein locking the communication link includes transmitting a first training sequence from a first and second port and synchronizing the receipt of the first training sequence at the first and second ports. However, this feature is old and well known in the art, as evidenced by Tetrick's teachings with

regards to locking a communication link, wherein locking the communication link includes transmitting a first training sequence from a first and second port and synchronizing the receipt of the first training sequence at the first and second ports (Tetrick; abstract, col. 2, lines 32-62 and col. 5, line 48-col. 6, line 22). It is respectfully submitted, that it would have been obvious, to one having ordinary skill in the art at the time the invention was made, to expand the system taught by Nord with Tetrick's teaching with regards to this limitation, with the motivation of ensuring the communication link is available (Tetrick; col. 5, line 48-col. 6, line 22).

The combined system of Nord and Tetrick collectively fail to expressly teach that the communication link comprises a plurality of data lanes and sending a first training sequence that contains a lane identifier of at least one of the plurality of the data lanes. However, the Examiner takes Official Notice (see MPEP § 2144.03) that the use of multiple data lanes in a communication link and the use of a lane identifier to transmit data over a communication link in a computer networking environment were well known in the art at the time the invention was made. The Applicant is entitled to traverse any/all official notice taken in this action according to MPEP § 2144.03. However, MPEP § 2144.03 further states "See also *In re Boon*, 439 F.2d 724, 169 USPQ 231 (CCPA 1971) (a challenge to the taking of judicial notice must contain adequate information or argument to create on its face a reasonable doubt regarding the circumstances justifying the judicial notice)." Specifically, *In re Boon*, 169 USPQ 231, 234 states "as we held in *Ahlert*, an applicant must be given the opportunity to challenge either the correctness of the fact asserted or the notoriety or repute of the reference cited in support of the assertion. We did not mean to imply by this statement that a bald challenge, with nothing more, would be all that was needed". Further note that 37 CFR § 1.671(c)(3) states "Judicial notice

means official notice". Thus, a traversal by the Applicant that is merely "a bald challenge, with nothing more" will be given very little weight.

Thus, it is respectfully submitted, that it would have been obvious, to one having ordinary skill in the art at the time the invention was made, to include multiple lanes in the communication link and send a first training sequence that contains a lane identifier of at least one of the plurality of data lanes , with the motivation of utilizing the bandwidth of the communication link more efficiently.

(B) As per claim 3, Nord fails to expressly teach wherein synchronizing the receipt of the first training sequence includes at least one of: synchronizing code group recognition and de-skewing multiple physical links. However, this feature is old and well known in the art, as evidenced by Tetricks teachings with regards to wherein synchronizing the receipt of the first training sequence includes at least one of: synchronizing code group recognition and de-skewing multiple physical links (Tetricks; lines 32-51). It is respectfully submitted, that it would have been obvious, to one having ordinary skill in the art at the time the invention was made, to expand the system taught by Nord with Tetricks teaching with regards to this limitation, with the motivation of ensuring the communication link is available (Tetricks; col. 5, line 48-col. 6, line 22).

(C) As per claims 4-12, the combined system of Nord and Tetricks collectively fail to expressly teach the features of claims 4-12. However, since claims 4-12 are drawn to the specifics of a particular communications protocol, it is respectfully submitted, that it would have

been obvious, to one having ordinary skill in the art at the time the invention was made, to expand the collective system taught by Nord and Tetrick to implement any defined communications protocol, with the motivation improving the flexibility of the data transfer system.

(D) Claim 13 differs from the features of claims 2 and 9 by reciting "receiving the second training sequence transmitted by the first and second ports, respectively, in synchrony." The combined system of Nord and Tetrick collectively fail to expressly teach this limitation.

However, since this feature is drawn to the specifics of a particular communications protocol, it is respectfully submitted, that it would have been obvious, to one having ordinary skill in the art at the time the invention was made, to expand the collective system taught by Nord and Tetrick to implement any defined communications protocol, with the motivation improving the flexibility of the data transfer system.

(E) Claims 14-21 repeat the features of claims 4-8 and 10-12, respectively, and are therefore rejected for the same reasons given above in the rejection of claims 4-8 and 10-12 and incorporated herein.

(F) As per claim 22, Nord teaches a method for training a link in a computer system, comprising:

configuring a first receiver in a first port using first training sequence or a second training sequence (Nord; abstract); and

transmitting the second training sequence from the first port indicating the first receiver is configured (Nord; abstract);

Nord fails to expressly teach receiving a second training sequence transmitted by a second port at the first port, the second training sequence transmitted by the second port indicating that a second receiver in the second port is configured. However, this feature is old and well known in the art, as evidenced by Tetrick's teachings with regards to receiving a second training sequence transmitted by a second port at the first port, the second training sequence transmitted by the second port indicating that a second receiver in the second port is configured. (Tetrick; abstract, col. 2, lines 32-62 and col. 5, line 48-col. 6, line 22). It is respectfully submitted, that it would have been obvious, to one having ordinary skill in the art at the time the invention was made, to expand the system taught by Nord with Tetrick's teaching with regards to this limitation, with the motivation of ensuring the communication link is available (Tetrick; col. 5, line 48-col. 6, line 22)

The combined system of Nord and Tetrick collectively fail to expressly teach wherein the first port is configured to send and receive data on a plurality of data lanes, and the first training sequence contains a lane identifier of at least one of the plurality of data lanes. However, the Examiner takes Official Notice (see MPEP § 2144.03) that the use of multiple data lanes in a communication link and the use of a lane identifier to transmit data over a communication link in a computer networking environment were well known in the art at the time the invention was made. The Applicant is entitled to traverse any/all official notice taken in this action according to MPEP § 2144.03. However, MPEP § 2144.03 further states "See also *In re Boon*, 439 F.2d 724, 169 USPQ 231 (CCPA 1971) (a challenge to the taking of judicial notice must contain

adequate information or argument to create on its face a reasonable doubt regarding the circumstances justifying the judicial notice)." Specifically, *In re Boon*, 169 USPQ 231, 234 states "as we held in *Ahlert*, an applicant must be given the opportunity to challenge either the correctness of the fact asserted or the notoriety or repute of the reference cited in support of the assertion. We did not mean to imply by this statement that a bald challenge, with nothing more, would be all that was needed". Further note that 37 CFR § 1.671(c)(3) states "Judicial notice means official notice". Thus, a traversal by the Applicant that is merely "a bald challenge, with nothing more" will be given very little weight.

Thus, it is respectfully submitted, that it would have been obvious, to one having ordinary skill in the art at the time the invention was made, to configure the first port to send and receive data on a plurality of data lanes, and the first training sequence contains a lane identifier of at least one of the plurality of data lanes, with the motivation of utilizing the bandwidth of the communication link more efficiently.

(G) Claims 23-29 repeat the features of claims 4-7 and 10-12, respectively, and are therefore rejected for the same reasons given above in the rejection of claims 4-7 and 10-12 and incorporated herein.

(H) As per claim 30, Nord teaches transmitting data from one of the first or second ports to the other of the first and second ports (Nord; abstract).

Response to Arguments

1. Applicant's arguments with respect to new claims 40-43 have been considered but are moot in view of the new ground(s) of rejection.

(A) At pages 8-10 of the 3/11/04 communication, Applicant argues each of the applied references individually. In response, the Examiner respectfully submits that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In particular, the teachings that Applicant argues are missing from the Nord and Tetrik references are clearly well-known in the art when considered in combination with the teachings of Nord and Tetrik, as discussed in detail within a prior Office Action (paper number 12) and in the preceding rejections, and incorporated herein.

Further, the features newly added and entered in the amendment filed 3/11/04, have been shown to be fully disclosed by or obvious in view of the collective teachings of Nord, Tetrik, and official notice, as discussed above in detail within the preceding sections of the present Office Action.

In addition, it is respectfully submitted that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have

suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited but not applied art teaches a system and method for sending multiple data signals over a serial link (5,835,498); and a system and method for implementing multi-pathing data transfer in a system area network.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Milan S Kapadia whose telephone number is 703-305-3887. The examiner can normally be reached on Monday through Friday, 8:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on 703-308-5221. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.


mk

MARC D. THOMPSON
MARC THOMPSON
PRIMARY EXAMINER

May 28, 2004